PATENT APPLICATION

# THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q55113

Toshihiro SHIMA

Appln. No.: 09/353,383

Group Art Unit: 2624

Confirmation No.: 3442

Examiner: King Y. POON

Filed: July 15, 1999

For:

PRINTING SYSTEM AND PRINTER WHICH SENDS JOB REQUESTS FOR

**PRINTING** 

#### SUBMISSION OF APPEAL BRIEF

#### **MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of \$500.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

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#### PATENT APPLICATION

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#### APPEAL BRIEF UNDER 37 C.F.R. § 41.37

#### MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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## I. REAL PARTY IN INTEREST

The real party in interest is SEIKO EPSON CORPORATION by virtue of an assignment executed by Toshihiro Shima (hereinafter "Appellant") on August 5, 1999 and recorded in the U.S. Patent and Trademark Office on September 21, 1999 at reel 010251 and frame 0105.

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## RELATED APPEALS AND INTERFERENCES

Upon information and belief, there are no other prior or pending appeals, interferences or judicial proceedings known to Appellant's Representative or the Assignee that may be related to, be directly affected by, or have a bearing on the Board's decision in the Appeal.

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# III. STATUS OF CLAIMS

Claims 1-36 are pending, of which claims 1-10 and 21-36 are withdrawn as being directed to a non-elected invention.

Claims 11-20 stand rejected and are the basis of this Appeal.

Only claims 11-20 are shown in the Claims Appendix.

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# IV. STATUS OF AMENDMENTS

Appellant did not amend the claims subsequent to the August 23, 2005 Final Office Action. Accordingly, all amendments, which have been made during prosecution of the present application, have been entered, and are reflected in the attached Claims Appendix.

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#### V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention is a directed to a printer and a method of operating the printer. The features of independent claims 11 and 16 are described herein in reference to non-limiting embodiments of Appellant's specification.

Claim 11 - Claim 11 recites a printer 23 having a job request section, a printing section, a printing section and a receive buffer memory 23A. The printing section of printer 23 demands job data 35, 37 of a print job from a host computer 27, 29 having the job data. The printing section of the printer 23 receives and prints the job data 35, 37 sent from the host computer 27, 29 in response to a request from the job request section. Further, the job request section sends the job request to the host computer 27, 29 according to a condition of the print engine and the receive buffer memory 23A (See figure 1 and pg. 5, line 7 to page 6, line 3).

Claim 16 - Claim 16 recites a method of operating a printer 23. In the claimed method, job data 35, 37 of a print job is demanded from a host computer 27, 29 having the job data, the demand of the job data referred to as a job request. The printer 23 receives and prints the job data 35, 37 sent from the host computer 27, 29 in response to the job request. Further, the job request is sent to the host computer 27, 29 according to a condition of a print engine and a receive buffer memory 23A of the printer (pg. 5, line 7 to page 6, line 3 and pg. 7, line 17 to page 18, line 12).

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#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 11-13 and 16-18 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over U.S. Patent No. 6,184,996 to Gase ("Gase") in view of U.S. Patent No. 5,490,237 to Zimmerman").

B. Claims 14, 15, 19 and 20 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Gase in view of Zimmerman and Pipeline Corporation (column 1, lines 48-60 of Gase) ("Pipeline")

#### VII. ARGUMENT

A. Rejection of claims 11-13 and 16-18 under 35 U.S.C. § 103(a) in view of Gase and Zimmerman.

#### 1. Claim 11

Appellant submits that claim 11 is patentable over the cited references. For example, claim 11 recites that the job request section sends a job request to the host computer according to a condition of the print engine and the receive buffer memory.

In the August 23, 2005 Final Office Action, the Examiner maintains that Gase discloses a job request section (i.e., browser 26 of printer 14), but acknowledges that Gase fails to disclose that the alleged job request section 26 sends a job request to a host computer according to a condition of the print engine and receive buffer memory of a printer. The Examiner, however, contends that Zimmerman does disclose such a feature. In particular, the Examiner refers to column 5 of Zimmerman regarding the processing of a print job according to a condition of a receive buffer memory and a print engine.

As set forth in the November 2, 2004 Amendment, Appellant notes that it is the <u>host</u> computer 10 of Zimmerman that determines the data transfer rate over the I/O 14 and sets the printer's buffer threshold based on the known speed of the print engine 34 (col. 5, lines 39-44). Therefore, any actions based on a condition of the print engine 34 and the I/O buffer RAM portions 40, 42 (alleged buffer memory), are taken by the host computer 10, <u>not</u> by a printer. On page 13 of the August 23, 2005 Final Office Action, the Examiner acknowledges that

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Zimmerman teaches that it is the "host computer" that sends a print job to the printer based on certain conditions.

In view of the above, and assuming the Examiner's proffered motivation, as set forth in the August 23, 2005 Final Office Action, is proper, the modification of Gase, by the specific teaching of Zimmerman, would result in the *host computers* 10, 12, etc. of Gase having a function of determining a data transfer rate over an I/O line and setting a buffer of printer 14 based on the known speed of a print engine of the printer 14. Since Zimmerman fails to disclose such a feature being provided in a printer, the alleged combination would <u>not</u> result in the modification of Gase's printer 14 itself, rather, just modification of the *host computers*, as set forth.

Based on the foregoing, Appellant submits that even if combined, the references fail to teach or suggest the claimed features. In particular, there is no teaching or suggestion, in Zimmerman, to provide the function of host computer 10 in its own printer 12, let alone the printer 14 of Gase.

In regard to the concept of a "dumb" printer and an "intelligent" printer, Appellant provided the following comments in the November 23, 2005 Response. As to a dumb printer, a printer driver installed in a host computer processes a print data to be printed and monitors and controls conditions of the printer. Thus, the transmission rate has to be decided at the host computer side by monitoring the condition of the printer, and the printer merely functions as a slave terminal. The printer disclosed in Zimmerman corresponds to a dumb printer.

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On the other hand, an intelligent printer has font data and language for processing the image data and performs a part of the function of the printer driver which is installed in the host computer. Thus, a part of image processing is performed by the printer side. However, the printer always only prints under the initiative of the host computer (or a print server) and cannot spontaneously print (i.e., cannot execute a print job set by a printer at a time set by the printer). The printer discussed in the background section of the present Application and the printer of Gase correspond to an intelligent printer.

The printer of an illustrative, non-limiting embodiment of the present invention corresponds to an intelligent printer with the added ability of being able to control an amount of received jobs stored in a buffer memory of the printer (i.e., a job request section of the printer sends a job request to the host computer according to a condition of the print engine and the receive buffer memory). Therefore, even if the dumb printer of Zimmerman were combined with the intelligent printer of Gase, the combination would still fail to teach or suggest the claimed invention.

In response to the above, the Examiner maintains that Zimmerman, "teaches the condition of the print engine and buffer memory in the printer determines when a print job is to be transferred to the printer" (continuation sheet to December 13, 2005 Advisory Action). The Examiner further maintains that, "[s]uch condition and determination is true and required by all printers...if the printer have print engines and buffer memories." Appellant respectfully traverses. For example, as set forth above, it is the host computer 10 of Zimmerman that determines the data transfer rate, not the printer.

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Further, in regard to the Gase reference, the Examiner maintains, "[s]ince the timing of transferring the print job, in Gase, is controlled by the printer; it is the printer's duty to request the print job from the host after determining condition of the print engine and the buffer memory" (continuation sheet to December 13, 2005 Advisory Action). As set forth in the August 23, 2005 Final Office Action, however, the Examiner maintains that Gase discloses a job request section (i.e., browser 26 of printer 14), but acknowledges that Gase fails to disclose that the alleged job request section 26 sends a job request to a host computer according to a condition of the print engine and receive buffer memory of a printer. Therefore, the Examiner's statements in the Advisory Action appear to contradict earlier statements. Nevertheless, Appellant submits that Gase's "intelligent printer" fails to teach or suggest the features of sending a job request to a host computer according to a condition of the print engine and a receive buffer memory (i.e., the added feature of the intelligent printer of the claimed invention).

Based on the foregoing, Applicant submits that claim 11 is patentable over the cited references.

#### 2. Claims 12 and 13

Since claims 12 and 13 are dependent upon claim 11, Appellant submits that such claims are patentable at least by virtue of their dependency.

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#### 3. Claims 16, 17 and 18

Since claim 16 contains features which are analogous to the features recited in claim 11, Appellant submits that claim 16 is patentable for at least analogous reasons as presented above.

In addition, since claims 17 and 18 are dependent upon claim 16, Appellant submits that such claims are patentable at least by virtue of their dependency.

# B. Rejection of claims 14, 15, 19 and 20 under 35 U.S.C. § 103(a) over Gase in view of Zimmerman and Pipeline.

Since claims 14, 15, 19 and 20 are dependent upon claims 11 and 16, respectively, and Pipeline fails to cure the deficient teachings of Gase and Zimmerman, in regard to claims 11 and 16, Appellant submits that claims 14, 15, 19 and 20 are patentable at least by virtue of their dependency.

In addition, Appellant submits that claims 14, 15, 19 and 20 are patentable for at least analogous reasons as set forth in the April 20, 2004 Amendment. For example, claim 14 recites that a job request section can specify a desired part of job data when the job request section sends a job request to a host computer. In response, the host computer sends (i.e., the printing section receives) only the desired part of the job data.

In the August 23, 2005 Final Office Action, the Examiner acknowledges that Gase fails to teach or suggest the above features, but contends that Pipeline does. However, Pipeline just discloses that a printer can be programmed to retrieve and print pages that are hyperlinked to an original document of a website (col. 1, lines 57-60). As noted above, claim 14 recites that the

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claimed job request section can specify a desired part of the job data, where the job data is data

generated from a print job (i.e. due to claim 14's dependency on claim 11). Pipeline fails to

disclose that the "original document" is the job data (i.e. data generated from a print job), such

that the hyperlinked pages are a "desired part" of the job data. Rather, since the reference

discloses that the printer is "programmed" to retrieve the hyperlinked pages, it appears that the

hyperlinked pages actually form the job data (i.e. the portion specified or programmed by a user

to be printed). Thus, the reference fails to teach or suggest that the printer can specify a desired

part of the alleged job data (i.e. a desired part of the specified hyperlinked pages).

Accordingly, Appellant submits that claim 14 is patentable over the combination of the

cited references. Since claims 15, 19 and 20 contain analogous features as claim 14, Applicant

submits that they are patentable for at least analogous reasons.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and

1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

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Date: February 22, 2006

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## **CLAIMS APPENDIX**

#### CLAIMS 11-20 ON APPEAL:

11. (rejected) A printer comprising:

a job request section for demanding job data of a print job from a host computer having said job data;

a printing section for receiving and printing said job data sent from said host computer in response to a request from said job request section;

a print engine; and

a receive buffer memory,

wherein said job request section sends said job request to said host computer according to a condition of said print engine and said receive buffer memory.

12. (rejected) A printer according to claim 11,

wherein said job request section receives job location data showing a location of said job data from a print server, and

said job request section sends a job request to said host computer which said job location data shows.

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13. (rejected) A printer according to claim 11, further comprising a print server for receiving job location data showing a location of said job data from said host computer and temporarily storing it,

wherein said job request section sends said job request to said host computer which said job location data stored in the print server shows.

14. (rejected) A printer according to claim 11,

wherein said job request section can specify a desired part of said job data for said host computer when said job request section sends said job request, and

said printing section receives only said desired part of said job data sent from said host computer in response to a request from said job request section and prints it.

15. (rejected) A printer according to claim 11, further comprising means which a location of each part constituting said job data is informed from said host computer,

wherein said job request section can specify a desired part of said job data for said host computer based upon said informed location of each part when said job request section sends said job request, and

said printing section receives only said desired part of said job data sent from said host computer in response to a request from said job request section and prints it.

16. (rejected) A method of operating a printer, comprising steps of:

demanding job data of a print job from a host computer having said job data; and receiving and printing said job data sent from said host computer in response to a job request of said demanding step,

wherein said job request is sent to said host computer according to a condition of a print engine and a receive buffer memory of said printer.

17. (rejected) A method according to claim 16, further comprising a step of receiving job location data showing a location of said job data from a print server,

wherein in said step of demanding, said job request is sent to said host computer which said job location data shows.

18. (rejected) A method according to claim 16, further comprising a step of receiving job location data showing a location of said job data from said host computer and temporarily storing it,

wherein, in said step of demanding, said job request is sent to said host computer which said stored job location data shows.

19. (rejected) A method according to claim 16,

wherein, in said step of demanding, a desired part of said job data can be specified for said host computer, and

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in said step of printing, only said desired part of said job data sent from said host computer in response to said job request is received and printed.

20. (rejected) A method according to claim 16, further comprising a step of being informed of a location of each part constituting said job data from said host computer,

wherein, in said step of demanding, a desired part of said job data can be specified for said host computer based upon said informed location of each part, and

in said step of printing, only said desired part of said job data sent from said host computer in response to said job request is received and printed.

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# EVIDENCE APPENDIX:

NONE

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# RELATED PROCEEDINGS APPENDIX

NONE